

# TLD HB (5.0-8.0:1) Lens Kit



## Installation Manual

R9842120

**Barco nv Events**

Noordlaan 5, B-8520 Kuurne

Phone: +32 56.36.89.70

Fax: +32 56.36.88.24

E-mail: [events@barco.com](mailto:events@barco.com)

Visit us at the web: [www.barco.com](http://www.barco.com)

**Barco nv Presentations**

Noordlaan 5, 8520 Kuurne

Phone: +32 56.36.82.11

Fax: +32 56.35.86.51

E-mail: [presentations.bid@barco.com](mailto:presentations.bid@barco.com)

Visit us at the web: [www.barco.com](http://www.barco.com)

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# 1. TLD HB (5.0-8.0:1) LENS KIT

## 1.1 Kit Contents

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### Kit Contents

#### Contents

- TLD HB (5.0-8.0:1) Lens.
- Installation Manual.
- Toraysee™ Cloth.

## 1.2 Removing the installed lens

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### What has to be done?

Removing the installed lens on the SLM series projector.

### Necessary Tools

No tools necessary.



**WARNING:** Risk of personal injury. Instructions for lens installation must be followed thoroughly.

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### How to remove the installed lens?

To remove the lens, follow the next procedure:

1. Support the lens with one hand. (image 1-1)
2. Move the handle of the lens anchor system to the left. (image 1-2)
3. Take the lens unit out of the lens block. (image 1-3)



Image 1-1  
Support the lens with one hand



Image 1-2  
Move the handle of the lens anchor system to the left



Image 1-3  
Take the lens out of the lens block

## 1.3 Installing the new lens

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### What has to be done?

This new lens has to be installed on the SLM series projector.

### Necessary Tools

No tools necessary.



**WARNING:** Risk of personal injury. Instructions for lens installation must be followed thoroughly.

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### How to install the new lens?

To install the lens, follow the next procedure:

1. Take the lens assembly out of its packing material and remove the lens caps on both sides.
2. Move the handle (A) of the lens anchor system to the right. (image 1-4)



3. Push the lens, motors at the top, in the lens block gap horizontally, lining up the motor connector on the lens with the connector on the lens block (B), until the lens clicks in the lens anchor system.

**Caution:** For a table mounted projector, hold the projector when pushing the lens into the lens block to avoid sliding off from the table.



Image 1-4  
Lens installation

## 1.4 Quick Lens Adjustment

### Quick zoom/focus adjustment

1. Press the Selection key \*, Barco key.

The zoom/focus menu will be displayed. (image 1-5)

2. Push the cursor key ↑ or ↓ to zoom and ← or → to focus the image.
3. When finished, press **EXIT** key to return or **ENTER** to continue to the shift adjustment.

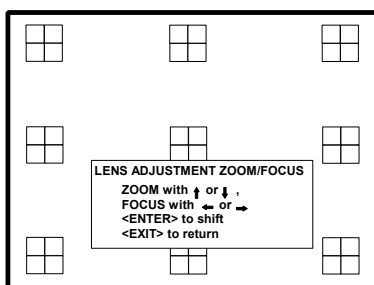


Image 1-5



Press the selection key \* to switch to another pattern. Different patterns are available.

### Quick shift adjustment

1. Press the Selection key \*, Barco key.

The zoom/focus menu will be displayed (image 1-5).

2. Press **ENTER**.

The shift menu will be displayed. (image 1-6)

3. Push the cursor key ↑ or ↓ to shift the image up or down and ← or → to shift the image left or right.
4. When finished, press **EXIT** key to return or **ENTER** to continue to zoom/focus.

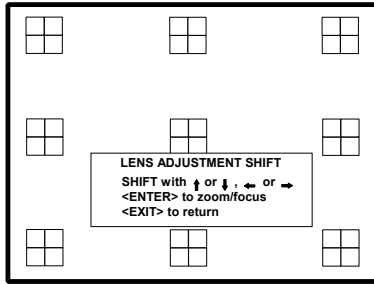


Image 1-6



Press the selection key \* to switch to another pattern. Different patterns are available.

## 1.5 Lens Formulas

### Lens Formulas

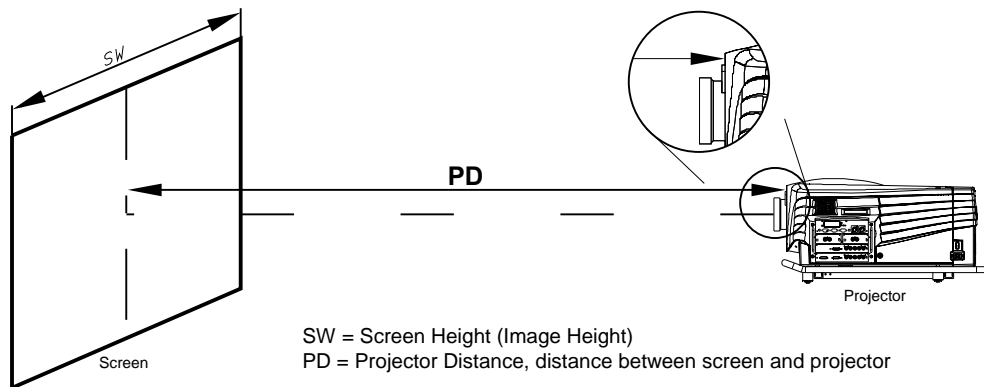


Image 1-7

To calculate the distance between the projector frontside and the screen (PD) for a given screenwidth (SW), use the following formula:

SLM Projector	Formula (in meter)	Formula (in inches)
SLM G5	$PD_{min} = 4.79 \times SW - 0.01$ $PD_{max} = 8.28 \times SW - 0.29$	$PD_{min} = 4.79 \times SW - 0.39$ $PD_{max} = 8.28 \times SW - 11.42$
SLM G8	$PD_{min} = 4.79 \times SW - 0.01$ $PD_{max} = 8.28 \times SW - 0.29$	$PD_{min} = 4.79 \times SW - 0.39$ $PD_{max} = 8.28 \times SW - 11.42$
SLM G10	$PD_{min} = 4.79 \times SW - 0.01$ $PD_{max} = 8.28 \times SW - 0.29$	$PD_{min} = 4.79 \times SW - 0.39$ $PD_{max} = 8.28 \times SW - 11.42$
SLM R6	$PD_{min} = 4.90 \times SW - 0.01$ $PD_{max} = 8.16 \times SW - 0.29$	$PD_{min} = 4.90 \times SW - 0.39$ $PD_{max} = 8.16 \times SW - 11.42$
SLM R8	$PD_{min} = 4.90 \times SW - 0.01$ $PD_{max} = 8.16 \times SW - 0.29$	$PD_{min} = 4.90 \times SW - 0.39$ $PD_{max} = 8.16 \times SW - 11.42$
SLM R10	$PD_{min} = 4.90 \times SW - 0.01$ $PD_{max} = 8.16 \times SW - 0.29$	$PD_{min} = 4.90 \times SW - 0.39$ $PD_{max} = 8.16 \times SW - 11.42$
SLM R12+	$PD_{min} = 4.52 \times SW - 0.01$ $PD_{max} = 7.53 \times SW - 0.29$	$PD_{min} = 2.58 \times SW - 0.39$ $PD_{max} = 4.71 \times SW - 11.42$

RLM Projector	Formula (in meter)	Formula (in inches)
RLM G5 (*)	$PD_{min} = 6.18 \times SW + 0.01$ $PD_{max} = 10.29 \times SW - 0.26$	$PD_{min} = 6.18 \times SW + 0.39$ $PD_{max} = 10.29 \times SW - 10.24$
RLM G5+ (*)	$PD_{min} = 6.18 \times SW + 0.01$ $PD_{max} = 10.29 \times SW - 0.26$	$PD_{min} = 6.18 \times SW + 0.39$ $PD_{max} = 10.29 \times SW - 10.24$
RLM H5 (*)	$PD_{min} = 4.94 \times SW + 0.01$ $PD_{max} = 8.23 \times SW - 0.26$	$PD_{min} = 4.94 \times SW + 0.39$ $PD_{max} = 8.23 \times SW - 10.24$
RLM R6+	$PD_{min} = 4.52 \times SW + 0.01$ $PD_{max} = 7.53 \times SW - 0.26$	$PD_{min} = 4.52 \times SW + 0.39$ $PD_{max} = 7.53 \times SW - 10.24$

(\*) Optical adapter R9832650 is required

## 1.6 Cleaning the lens



To minimize the possibility of damaging the optical coating or scratching exposed lens surface, we have developed recommendations for cleaning the lens. **FIRST**, we recommend you try to remove any material from the lens by blowing it off with clean, dry deionized air. **DO NOT** use any liquid to clean the lenses.

### Necessary tools

Toraysee™ cloth (delivered together with the lens kit). Order number : R379058.

### How to clean the lens ?

Proceed as follow :

1. Always wipe lenses with a CLEAN Toraysee™ cloth.
2. Always wipe lenses in a single direction.  
**Warning:** Do not wipe back and forwards across the lens surface as this tends to grind dirt into the coating.
3. Do not leave cleaning cloth in either an open room or lab coat pocket, as doing so can contaminate the cloth.
4. If smears occur when cleaning lenses, replace the cloth. Smears are the first indication of a dirty cloth.



**WARNING:** Do not use fabric softener when washing the cleaning cloth or softener sheets when drying the cloth.

Do not use liquid cleaners on the cloth as doing so will contaminate the cloth.



**CAUTION:** Other lenses can also be cleaned safely with this Toraysee™ cloth.



**Revision Sheet**

To:

► **Barco nv Events/Documentation**  
Noordlaan 5, B-8520 Kuurne  
Phone: +32 56.36.89.70, Fax: +32 56.36.88.24  
E-mail: antoon.dejaegher@barco.com, Web: www.barcocom

From: \_\_\_\_\_

Date: \_\_\_\_\_

Please correct the following points in this documentation (**R5976666/01**):

page	wrong	correct